



# **Indiana Conservation Reserve Enhancement Program 2011 Annual Report**

Submitted by the  
Indiana State Department of Agriculture  
Division of Soil Conservation

## 1. Introduction

August 2011, marked the first anniversary of the expansion of the Conservation Reserve Enhancement Program (CREP) in Indiana. The program expanded from the original three watersheds to 11 priority watersheds which touch 65 counties (Figure 1). This expansion reaches a major milestone of the Indiana State Department of Agriculture (ISDA) and the USDA Farm Service Agency (FSA), showcasing Indiana's progressive and meaningful implementation of conservation practices to protect Indiana's soil, water and related natural resources, and to help alleviate hypoxia in the Gulf of Mexico<sup>1</sup>.

CREP addresses water quality and wildlife issues by the reduction of sediments and nutrients (i.e. nitrogen and phosphorus) and the enhancement of wildlife habitats, including State and Federally-listed threatened and endangered species. CREP seeks to restore riparian buffers and wetlands to improve water quality. The program operates under an Agreement between the U.S. Department of Agriculture (USDA) and the State of Indiana, dated July 8<sup>th</sup> 2005 and amended thereafter.

The Agreement provides that the State of Indiana shall contribute at least 20 percent of the overall annual in-kind and direct program costs (i.e. 80 percent covered by USDA). ISDA administers the CREP program on behalf of the State and must submit to FSA information summarizing the status of enrollments and progress of CREP by January 1<sup>st</sup> of each year. This report fulfills this obligation.

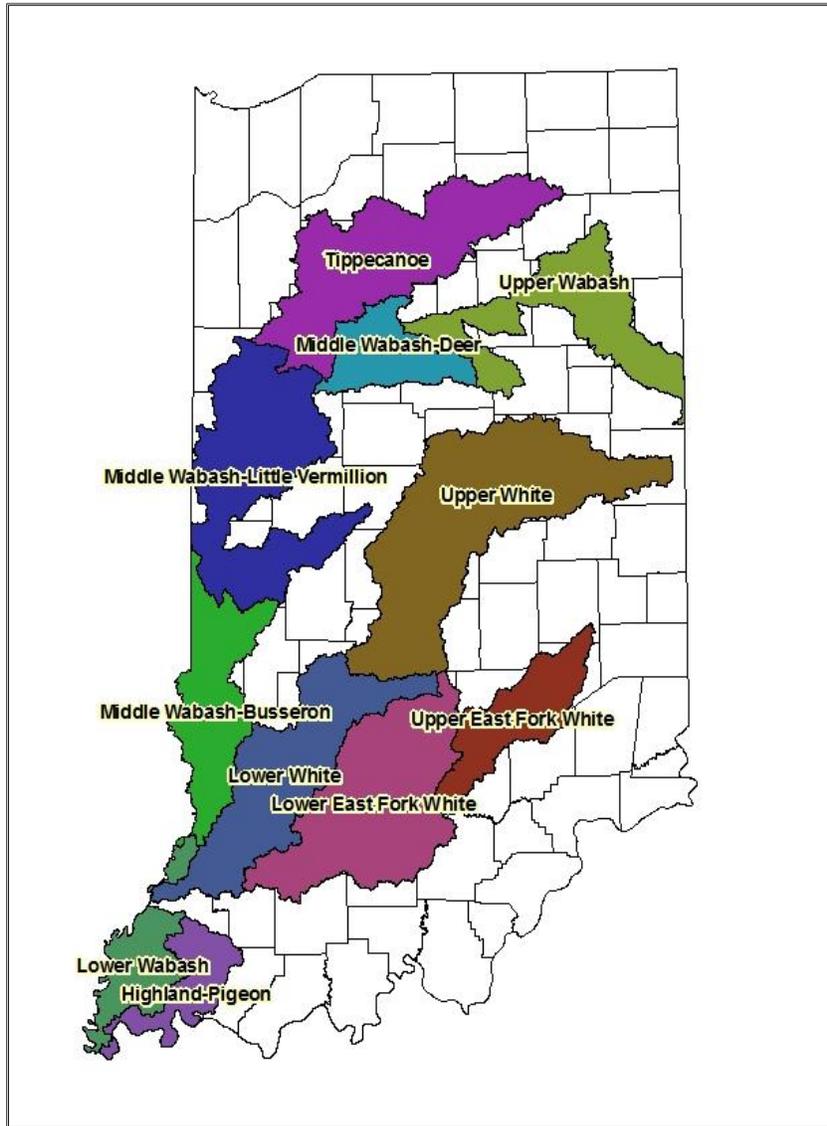
Initially, Indiana's CREP called for 7,000 acres of enrollment in three watersheds: the Tippecanoe, Upper White and Highland-Pigeon watersheds. On August 27<sup>th</sup> 2010, ISDA and FSA staff, joined by Indiana's Lt. Governor Becky Skillman and conservation partner leaders, welcomed eight additional watersheds into CREP: the Lower East Fork White, Lower Wabash, Lower White, Middle Wabash – Busseron, Middle Wabash – Deer, Middle Wabash – Little Vermillion, Upper East Fork White, and Upper Wabash. The expansion also extended the enrollment goal to 26,250 acres.

In 2010, upon the CREP expansion, ISDA partnered with 10 Soil and Water Conservation Districts (SWCDs) to assist ISDA in administering funds to landowners and streamlining the process (Figure 2). As Table 1 indicates, the State has paid more than \$18,000 in administrative fees to partner SWCDs.

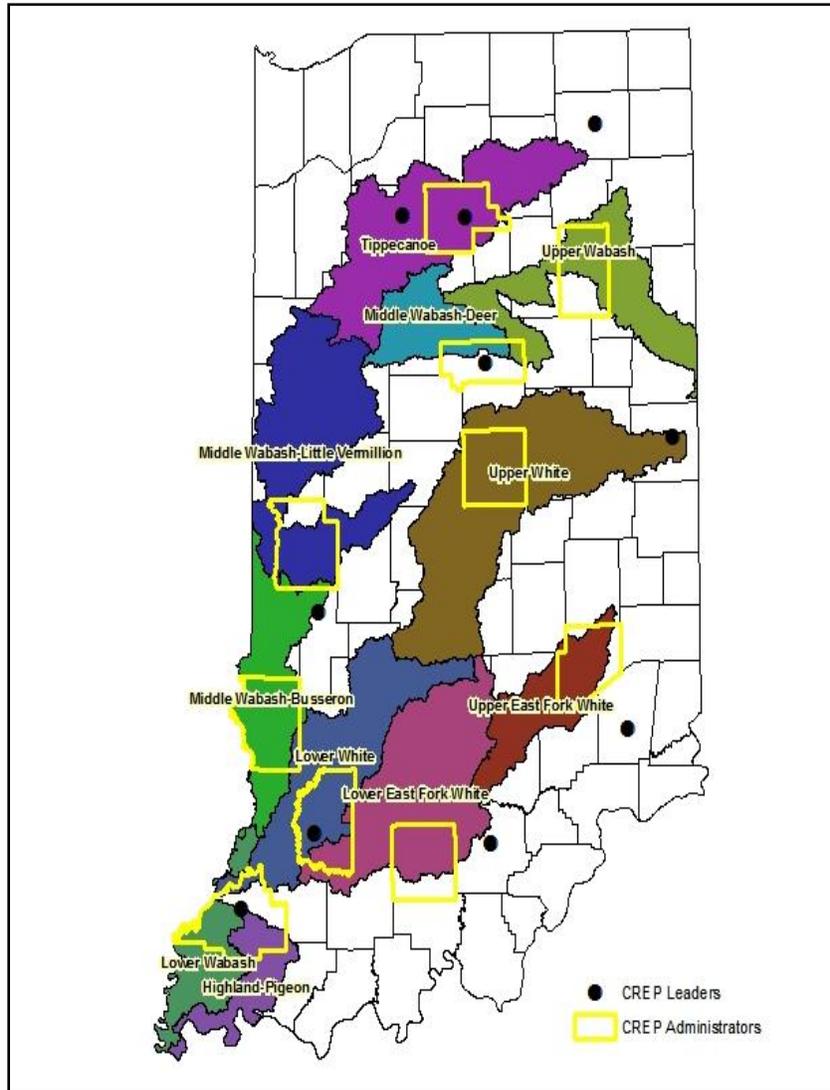
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<sup>1</sup> Drainage from Indiana eventually finds its way to the Gulf via the Ohio and Mississippi Rivers. A fraction of nitrogen and phosphorus originating from Indiana end ups in the Gulf and contributes to a low dissolved oxygen area (hypoxic zone), threatening aquatic habitats in the Gulf.

**FIGURE 1. 11 CREP ELIGIBLE WATERSHEDS**



**FIGURE 2: ISDA CREP LEADERS AND SWCD ADMINISTRATORS**



**TABLE 1: SUMMARY OF COMPLETED CONTRACTS AND COMPLETED STATE FUNDS AS OF SEPTEMBER 30, 2011**

Watershed	SWCD CREP Administrators	Completed Contracts	Completed State Funds	SWCD Administrative Fees (since expansion)
Upper White River Watershed	Hamilton Co.	239	\$649,140.00	\$5,596.50
Tippecanoe River Watershed	Fulton Co.	519	\$755,365.00	\$1,573.00
Highland-Pigeon Watershed	Gibson Co.	108	\$78,114.00	\$3,087.50
Lower East Fork	Orange Co.	2	\$10,440.00	\$1,044.00
Lower Wabash	Gibson Co.	1	\$2,504.00	\$250.00
Lower White	Daviess Co.	1	\$6,960.00	\$696.00
Middle Wabash Busseron	Sullivan Co.	1	\$41,040.00	\$4,104.00
Middle Wabash Deer	Howard Co.	0	\$0.00	\$0.00
Middle Wabash Vermillion	Parke Co.	0	\$0.00	\$0.00
Upper East Fork White	Decatur Co.	1	\$13,360.00	\$1,336.00
Upper Wabash	Huntington Co.	2	\$8,520.00	\$852.00
<b>TOTAL</b>		<b>874</b>	<b>\$1,565,443.00</b>	<b>\$18,539.00</b>

## 2. CREP Growth

As of September 30, 2011, more than 1.5 million dollars in State funds<sup>2</sup> (Table 1) were awarded to landowners for 874 completed contracts<sup>3</sup>, representing more than 6,000 acres enrolled in CREP and a 35 percent increase from the previous year (Table 3). Approximately, 600 linear miles of watercourses are currently protected through the installation of conservation buffer practices.

Due to the expansion, ISDA - Division of Soil Conservation (DSC) maintains 10 CREP leaders who are located throughout the state (Figure 2) to provide technical assistance to landowners, create conservation plans and oversee daily CREP activities. Also, a Program Manager handles all aspects of the program and provides technical



*ISDA awarded in July 2011 the first post-expansion CREP payment to Mr. Kenneth Farrington (third, left to right). Under CREP, Mr. Farrington planted bottomland timber on 102.6 acres of his property along the Wabash River in the Middle Wabash-Busseron watershed. About 51,000 tree samplings were planted*

<sup>2</sup> State funds and “Completed State Funds” refer to payments that have been made to landowners

<sup>3</sup> Completed Contracts are those projects where conservation practices have been installed

expertise, and a DSC Director provides overall supervision and critical decision-making. Additionally, a Program Manager of Accountability and Technology and an Administrative Assistant provide CREP related duties as needed. ISDA continues to supplement this core staff with Resource Specialists to accommodate seasonal workload and marketing opportunities. As previously indicated, 10 SWCDs currently administer funds to landowners in order to streamline the process.

There are many partners involved with the promotion, administration, technical assistance and funding of CREP; thus, coordinating conservation programs with CREP. Our CREP partners include FSA, USDA Natural Resource Conservation Service (NRCS), Indiana Department of Environmental Management (IDEM), Indiana Department of Natural Resources (DNR), SWCDs, The Nature Conservancy (TNC) and the Indiana Conservation Partnership (ICP).

ICP brings together leaders from the Indiana Association of Soil and Water Conservation Districts (IASWCD), IDEM, DNR, Purdue University Cooperative Extension Service, the State Soil Conservation Board (SSCB), FSA and NRCS. CREP is one of the top four priorities of this partnership. The SSCB provides policy and funding direction to the Indiana State Department of Agriculture-Division of Soil Conservation on the administration of the Clean Water Indiana program (CWI)<sup>4</sup>.

As CREP has continued to grow, the objectives of the program have evolved:

- Protect a minimum of 3,000 linear miles of watercourses through the installation of conservation buffer practices
- Reduce by 8% the amount of sediments, nutrients, and agricultural chemicals entering watercourses within the targeted watersheds
- Increase the acres of wetlands in the watersheds for erosion control, sediments reduction, stormwater retention, and nutrient uptake.
- Enroll 15% of the eligible watersheds' cropland, subject to normal CRP acreage limits by county
- Enroll 8% of the CREP acres in voluntary, ten-year contracts in the Tippecanoe watershed.
- Enroll 10% of the CREP enrolled acres in voluntary, permanent easements in the Tippecanoe and Upper White River watersheds.
- Seek enrollment of 26,250 acres of eligible cropland including frequently flooded agricultural lands, and restorable wetlands.

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<sup>4</sup> CWI contributes critical state funds to CREP

### 3. Easements

The option for landowners to participate in conservation easements within the Tippecanoe River watershed and the Upper White River watershed are included in the CREP program. TNC and the Upper White River Restoration Fund (administered by DNR) provide funding for the easement programs.

The Tippecanoe River is one of Indiana's most important and ecologically significant rivers. A large number of threatened and endangered species inhabit this river, making it especially important to preserve. The Nature Conservancy has led this preservation effort and has contributed significant time and financial resources for easements in the Tippecanoe River watershed. In 2010, ISDA reported nine easements in the Tippecanoe watershed totaling 444.28 acres and \$222,140. Currently, there are 13 easements totaling 733 acres and \$366,560 in payments to the landowners.

In the Upper White River, a large fish kill was the result of a pollutant spill from a manufacturing plant in 1999. As part of the settlement, funds were set aside for easements through the CREP program by the Board of the Upper White River Restoration Fund. In 2010, ISDA reported one easement totaling 35 acres and \$31,500. At the end of Federal Fiscal Year (FFY) 2011 (October 1, 2010-September 30, 2011), CREP had enrolled three easements for a total of 72 acres and a total cumulative incentive of \$64,800. Currently, these three easements are at various stages of the processing cycle.

### 4. Eligible Practices

The Indiana CREP offers a menu of conservation practices to address nonpoint source pollution runoff issues. Table 2 identifies the various conservation practices offered through CREP and are further discussed below:

**TABLE 2: CONSERVATION PRACTICES AND CODES**

Conservation Practice	Practice Code
Permanent Native Grass	CP2
Hardwood Tree Planting	CP3A
Permanent Wildlife Habitat, Non-easement	CP4D
Riparian Buffer	CP22
Filter Strips	CP21
Wetland Restoration	CP23
Wetland Restoration, Non-floodplain	CP23A
Bottomland Timber Establishment	CP31

Practices **CP2, CP3A, CP4D, CP22 and CP21** must be installed on former cropland adjacent to an eligible stream, river or waterbody and meet additional requirements:

**CP2 – ESTABLISHMENT OF PERMANENT NATIVE GRASS**

**ADDITIONAL REQUIREMENTS:** practice **CP2** must have a minimum average width of 50 feet and a maximum average width of 120 feet (up to 300 feet in alluvial soils)

- CP3A – HARDWOOD TREE PLANTING,**
- CP4D – PERMANENT WILDLIFE HABITAT, NON-EASEMENT; AND**
- CP22 – RIPARIAN BUFFER**

**ADDITIONAL REQUIREMENTS:** practices **CP3A, C4D** and **CP22** must have a minimum average width of 35 feet and a maximum average width of 180 feet (up to an average width of 300 feet in alluvial soils)

**CP21 – FILTER STRIP**

**ADDITIONAL REQUIREMENTS:** practice **CP21** must have a minimum average width of 35 feet and a maximum average width of 120 feet (up to 300 feet average width in alluvial soils)

The following conservation practices are also available. They do not have to be adjacent to an eligible stream, river or waterbody:

- CP23 – WETLAND RESTORATION IS AVAILABLE WITHIN THE 100-YEAR FLOODPLAIN,**
- CP23A – WETLAND RESTORATION – NON-FLOODPLAIN; AND**
- CP31 – BOTTOM TIMBER ESTABLISHMENT ON WETLAND**

## **5. Completed Acres for Federal Fiscal Year 2011**

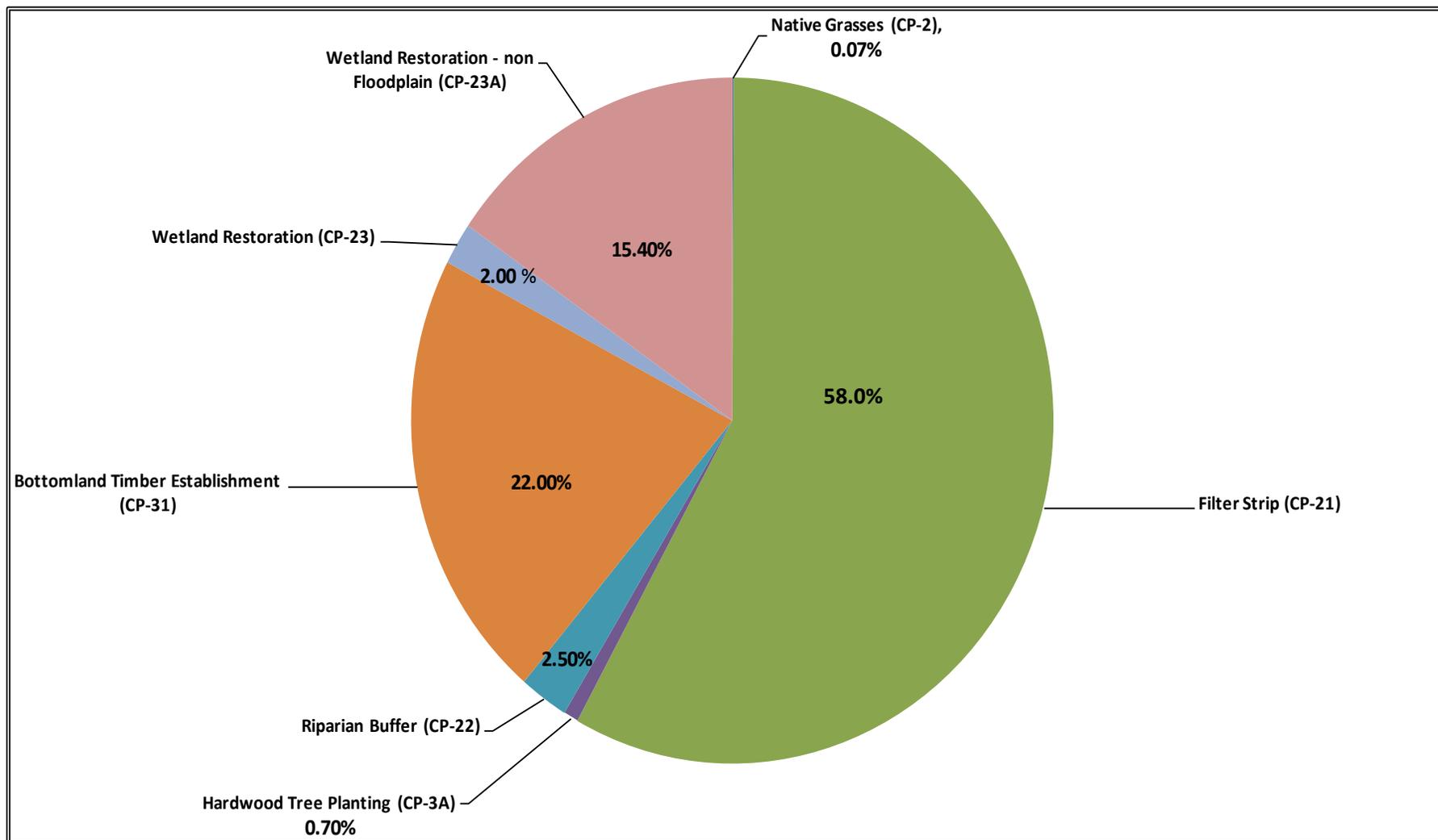
In FFY 2011, landowners signed up for a variety of conservation practices offered through CREP. Table 3 provides a summary of acreage enrolled in CREP since inception and Figure 3 illustrates the overall composition of conservation practices. The three original watersheds dominate the number of acres enrolled in CREP. It is anticipated that a minimum of 900 acres will be completed (i.e. installed conservation practices) in early 2012, many of which are located in the newest eight watersheds. DSC believes that the vast majority of these conservation practices will be bottomland timber establishment (**CP31**). This is a shift from the previously predominant Filter Strips (**CP21**), due to a CREP policy requiring positive sheet flow across the filter strip.

**TABLE 3: ENROLLED ACREAGE BY WATERSHED AND CONSERVATION PRACTICE AS OF SEPTEMBER 30, 2011**

Watershed	Native Grasses	Permanent Wildlife Habitat	Filter Strip	Hardwood Tree Planting	Riparian Buffer	Bottomland Timber Establishment	Wetland Restoration	Wetland Restoration (non floodplain)	Total
	CP-2	CP-4D	CP-21	CP-3A	CP-22	CP-31	CP-23	CP-23A	
	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres
Upper White River Watershed	1.6	0.0	413.1	1.0	127.1	1,003.8	0.0	16.0	1,562.6
Tippecanoe River Watershed	0.0	0.0	2,916.8	0.0	7.8	20.4	121.7	924.0	3,990.7
Highland-Pigeon Watershed	2.5	0.0	214.8	10.8	16.0	113.8	0.0	0.0	357.9
Lower East Fork	0.0	0.0	0.0	0.0	0.0	26.1	0.0	0.0	26.1
Lower Wabash	0.0	0.0	0.0	0.0	0.0	6.3	0.0	0.0	6.3
Lower White	0.0	0.0	0.0	0.0	0.0	17.4	0.0	0.0	17.4
Middle Wabash Busseron	0.0	0.0	0.0	0.0	0.0	102.6	0.0	0.0	102.6
Middle Wabash Deer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Wabash Vermillion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Upper East Fork White	0.0	0.0	0.0	33.4	0.0	0.0	0.0	0.0	33.4
Upper Wabash	0.0	0.0	0.0	0.0	0.0	21.3	0.0	0.0	21.3
<b>TOTAL</b>	<b>4.1</b>	<b>0.0</b>	<b>3,544.7</b>	<b>45.2</b>	<b>150.9</b>	<b>1,311.7</b>	<b>121.7</b>	<b>940.0</b>	<b>6,118.3</b>

**Note: In the 2010 CREP Annual Report, 4,520 acres were enrolled in CREP. The enrolled acreage consists of farmland where conservation practices have been completed**

**FIGURE 3: TYPE AND PERCENTAGE OF ALL INSTALLED CREP CONSERVATION PRACTICES AS OF SEPTEMBER 30, 2011**



One of the CREP objectives is to increase the acres of wetlands in the watersheds for erosion control, sediment reduction, stormwater retention, and nutrient uptake.



*Benefits of wetlands include erosion control, sediment reduction, stormwater retention, and nutrient uptake.*

In order to facilitate more enrollment of this conservation practice, the wetland design guidelines (**CP23** and **CP23A**) were modified effective December 6, 2011. The most significant revision is the reduction of the minimum drainage area requirement from 500 acres to 25 acres. This revision ensures that sites with the greatest potential benefit from CREP. It will open the option of installing and restoring wetlands where they will have a significant impact without the constraint of meeting a large minimum size drainage area requirement.

## 6. Financial Contributions

CREP provides financial incentives to landowners through both state and federal contributions. Through CREP, eligible Indiana participants who establish one of the prescribed conservation practices receive cost-share and rental payments as outlined below.

### FEDERAL INCENTIVES

- **SIGNING INCENTIVE PAYMENT:** A one-time payment of \$100 per acre for land enrolled in **CP21, CP22, CP23, CP23A** and **CP 31**. This payment may be made after the contract has been signed and is approved for 14-15 year contracts.
- **PRACTICE INCENTIVE PAYMENT:** A one-time payment equal to 40% of the eligible reimbursable cost to establish, **CP21, CP22, CP31, CP23, and CP23A**
- **COST-SHARE ASSISTANCE:** Cost-share of up to 50% to install approved conservation practices.
- **ANNUAL RENTAL PAYMENT:** An annual payment for the life of the contract. The payment consists of the sum of three components:

### LANDOWNERS BENEFIT FINANCIALLY

*A landowner had a 6.5 acre area of land prone to flooding. When crops did grow, the land was very productive, but often, crops did not grow. The landowner considered abandoning the field.*

*After working with an ISDA CREP coordinator, the landowner opted to plant the 6.5 acres with trees. After the Federal and State incentive payments and cost share, the landowner net gain was \$4,050.00. In addition, the landowner will receive annual rental payments for the life of the contract.*

**Base Soil Rental Rate:** Determined by calculating the normal CREP weighted average soil rental rate for the three predominant soil types using the current posted applicable local soil rental rates for cropland.

**Incentive Payment** of 40% of the base rental rate without regard to other incentive payments for all practices offered and eligible for CREP.

**Annual Maintenance Payment** according to regular continuous CREP enrollments.

## STATE INCENTIVES

- **One-Time Payment** Clean Water Indiana Payment (CWIP) to participants of \$950 per acre for land enrolled in **CP23** or **CP23A**.
- **One-Time Payment** Clean Water Indiana Payment (CWIP) to participants of \$400 per acre for land enrolled in **CP3A**, **CP22**, or **CP31**.
- **One-Time Payment** CWIP to participants of \$100 per acre for land enrolled in **CP2**, **CP4D** or **CP21**.
- **One-Time Payment** of \$500 per acre for **CP3A**, **CP22** and **CP31** for land voluntarily enrolled in permanent easements in a priority area within the Upper White River Watershed.
- **One-Time Payment** of \$500 per acre for **CP3A**, **CP22** and **CP31** for land voluntarily enrolled in state permanent easements in a priority area within the Tippecanoe Watershed; or \$250 per acre for **CP3A**, **CP4D**, **CP22**, **CP23**, **CP23A** and **CP31** voluntarily enrolled in 10-year contract extensions in a priority area within the Tippecanoe Watershed.

## MATCH

The provisions within the Indiana CREP agreement state: “The State of Indiana will contribute at least 20 percent of the overall costs of implementing the CREP through a combination of annual in-kind services and direct program costs.” For the FFY 2011, Indiana contributed 23.6 percent. For the length of the CREP program, Indiana’s contribution is currently 20.8 percent.

## STATE CASH MATCH

For FFY 2011, Indiana’s cash match contributed 12.2 percent of the total cash. For the length of the CREP program, Indiana’s cash match is currently 8.4 percent (Table 4), funded primarily by the Clean Water Indiana program.

**TABLE 4: INDIANA’S CASH MATCH**

Cash Match	CREP Program Total	2011 Total
Federal Total	\$22,484,808	\$4,143,192
State Cash	\$1,565,443	\$502,096
CREP Coordinator	\$450,000	\$75,000
2004 Programmatic Environmental Assessment (PEA)	\$53,102	\$0
State Total	\$2,068,545	\$577,096
<b>All Total</b>	<b>\$24,553,353</b>	<b>\$4,720,288</b>
<b>State Cash Match (%)</b>	<b>8.4%</b>	<b>12.2%</b>

**STATE IN-KIND SERVICES**

The DSC implements the state’s portion of the CREP administration. The CREP responsibilities include working directly with interested landowners to develop conservation plans, as well as sign-up, tracking and marketing. Figure 2 shows the location of ISDA employees whose major focus is the CREP program, as well as the location of employees who assist with CREP implementation. State partners also contribute to the in-kind responsibilities. In FFY 2011, the in-kind contribution was 11.4 percent. So far, the overall in-kind contribution to CREP is 12.4 percent (Table 5).



*ISDA maintains 10 CREP leaders who are located throughout the state to provide technical assistance to landowners, create conservation plans and oversee daily CREP activities*

**TABLE 5: INDIANA’S IN-KIND MATCH**

<b>State In-Kind Match</b>	<b>2011 Total</b>	<b>CREP Program Total</b>
10 technical staff 1/2 time	\$375,000	\$2,250,000
Adm Duties	\$52,500	\$240,000
SSCB	\$1,050	\$6,300
Directors	\$22,500	\$135,000
Steering Committee	\$0	\$27,300
DNR (easement processing time)	\$1,154	\$6,924
SWCD Administrative Fees	\$18,549	\$18,539
Purdue University Wetland Study	\$0	\$25,000
Indiana University Wetland Study	\$0	\$38,000
Schneider Wetland Study	\$0	\$39,500
<b>Total</b>	<b>\$470,753</b>	<b>\$2,786,563</b>
<b>State In-Kind Match (%)</b>	<b>11.4%</b>	<b>12.4%</b>

## 7. Monitoring and Evaluation

DSC is exploring options with the Mississippi River/Gulf of Mexico Watershed Nutrient Task Force<sup>5</sup>, also known as the Hypoxia Task Force, to obtain site specific water quality data and develop watershed models. Watershed modeling is a robust tool for evaluating the effectiveness of numerous conservation practices simultaneously.

In September 2011, DSC developed an edge-of-field modeling application to simulate the effectiveness of CREP conservation practices at the immediate location of an adjacent stream, river or waterbody. The modeling tool estimates that installed CREP conservation practices have contributed (on average) to the reduction of sediments by  $8 \times 10^6$  pounds per year, phosphorus by  $6 \times 10^3$  pounds per year, and nitrogen by  $13 \times 10^3$  pounds per year. Therefore, CREP has been progressively playing an important role in the reduction of sediments and nutrients to Indiana’s surface waters.

Starting in January 2012, CREP leaders will apply the model to each newly installed CREP conservation practice to estimate the effects of the practice on sediments, nitrogen and phosphorus. These data will continue to be gathered and they will provide cumulative information on the efficiency of CREP.

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<sup>5</sup> The Task Force is composed of federal agencies, states and tribes.

## **8. The Future of CREP in Indiana**

ISDA and partners are now focused on the marketing and implementation of CREP, as well as ensuring the sign-up process is smooth for landowners. A Communications/Outreach Plan is being developed by DSC. This plan will serve as a roadmap for DSC to communicate, outreach, market and seek applicants in an organized and strategic manner. The Communications/Outreach Plan is expected to be completed in the first quarter of 2012.

DNR and ISDA have discussed the mutually beneficial potential for establishing an Interagency Agreement to promote DNR's Healthy Rivers Initiative (HRI) and CREP. It is envisioned this collaboration shall include hiring a Conservation Program Specialist who would focus on promoting HRI and CREP with landowners and increasing acres enrolled in either of these programs through outreach efforts.

This is an exciting time to be involved in conservation in Indiana. ISDA is proud to have played a key role in expanding CREP, and expanding opportunities for landowners while improving the environment.

ISDA would like to thank the efforts of our many partners in conservation who supported CREP in Indiana during its inception and continue to support this program through the expansion. We realize that without the support of the SSCB, FSA, CWI and all of our conservation partners, the success of this program would not be possible.